CUSTOMER
Region Hovedstaden, The Capital Region of Denmark

WEB SITE
www.regionh.dk

INDUSTRY
Danish Healthcare Provider

LOCATION
Hillerød, Denmark

KEY CHALLENGES
- Replace legacy IT systems that were negatively impacting patient care

- Provide 25,000 healthcare workers with an effective, fast and agile workspace, accessible from any device, anywhere

SOLUTION
- The VMware AlwaysOn Point of Care solution, based on VMware Horizon View, was implemented across two datacenters to allow for 24/7 operations of the platform, multiside failover and disaster recovery. Horizon View brokers client requests, and authenticates and allocates virtual desktops to users.

BUSINESS BENEFITS
- Improved end-user productivity

- SSO and simplified application delivery

- Reduced support costs

Region Hovedstaden

VMware AlwaysOn Point of Care Solution helps improve patient care in Region Hovedstaden, the Capital Region of Denmark

By the mid-2000s, the Danish government legislated for healthcare providers to improve an impossible situation where legacy IT systems was negatively impacting patient care. Region H tasked its IT department with providing 25,000 healthcare workers with an effective, fast and agile workspace, accessible from any device, anywhere. Out of a number of possible solutions, they chose the VMware AlwaysOn Point of Care Solution, leading to timesavings, improved productivity, and reduced support costs.

Region H, the Capital Region of Denmark, stretches from the island of Bornholm in the east of Denmark to Hundested in the west, and compromises 29 municipalities. The region provides healthcare, mental healthcare and regional development for 1.7 million people or 30% of the population of Denmark, in addition to doing research. The region employs 36,000 people – mainly health care professionals – making it one of Denmark's largest employers.

The Challenge

By the mid-2000s, the Danish government faced an extraordinary challenge. The legacy IT systems at many of its healthcare providers were negatively impacting patient care. Excessive login and access times to applications and data were causing doctors and nurses to spend less time in front of each patient. IT departments were spending their efforts on setting up and maintaining individual PCs for each clinical worker. The situation was so out of balance that the Danish government legislated their healthcare providers to improve it.

The Danish healthcare system tasked Region H with providing an effective workspace for 25,000 clinical workers in their region, with the overall business objective of implementing the Effective System Access (ESA) program. ESA would streamline application delivery across multiple desktop types, utilize single sign-on (SSO), and drastically lower the time that clinicians were spending on login and application launches.

The Solution

The implementation team quickly identified several key drivers. There was a need to streamline application delivery across multiple desktop types, as well as provide secure remote access for doctors and healthcare workers. Even more important was the directive to drastically lower clinicians' login and reconnect times, while allowing users to keep the same desktop between sessions.

Region H launched the project in October 2009 with an initial assessment of three different solutions. After almost 12 months of financial and technical validation, in November 2010 the IT department chose VMware as the vendor for the solution. From December 2010 to December 2011, Region H implemented a pilot infrastructure, and a full production environment, including load testing, working closely with VMware.

VMWARE FOOTPRINT
- VMware AlwaysOn Point of Care Solution
- VMware Horizon View
- VMware vSphere
- VMware vCenter Server
- VMware ESXi

APPLICATIONS VIRTUALIZED
- +140 applications have been virtualised with ThinApp.

PARTNER
- VMware PSO were engaged in design and implementation

The VMware AlwaysOn Point of Care solution, based on VMware Horizon View, was implemented across two datacenters to allow for 24/7 operation of the platform. Horizon View is the software component that brokers client requests, and authenticates and allocates virtual desktops to users. The design follows the VMware best practice reference architecture approach of Horizon View blocks, which together make up a single 10,000-desktop pod. The IT organization duplicated the pod approach in a second datacenter to provide multisite failover and disaster recovery.

"Working with VMware has proven to be a great benefit for the project," said Møllegaard. "This way we got quick and direct access to SMEs, and we got focus from VMware management. Further, we have had great use of our TAM (Technical Account Manager)—when a service request for some unknown reason got delayed, he could push it forward, and we always had a 'VMware internal' speaking for the customer."

The IT organization at Region H viewed VMware technology as the cornerstone of its VDI solution. "We chose VMware for this project because of its product and engagement flexibility, which we saw in the pilot phase," said Morten Møllegaard, lead technical project manager. "This has lived up to our expectations during the production implementation."

The ESA project for Region H was by far the largest healthcare VDI solution in Northern EMEA. It has set new standards for VDI-based computing in the region.

Business Results & Benefits

In less than two years since Region H launched the ESA project with its initial design and implementation, the healthcare system was able to bring all 25,000 users into the production environment, with support for up to 8,000 concurrent users. IT based the solution on 24/7 support requirements, as users must be able to access the platform at any time.

The benefits of the system were realized immediately. Doctors and nurses could complete a first-time login to their desktop within two minutes and a reconnect in only seven seconds, regardless of their location, saving huge amounts of time each day. By using single sign-on, the users had to authenticate only once to access their applications.

Doctors were also given the ability to access their desktop sessions securely from outside the hospital. This functionality provides greater flexibility for the Region H workforce.

The benefits of deploying small, easy-to-clean, "healthcare friendly" zero client devices with lower management overhead, freed the IT organization to focus on improving the centralized infrastructure. IT manages desktops in the datacenter by using VMware View Composer™ technology alongside application virtualization, with VMware ThinApp® to deploy stateless desktops. This allows IT to manage a single common desktop image from a central management console. VMware ThinApp also provides the ability to update and fix applications from a single central repository, without having to fix applications on individual PCs, saving time.

With the ESA solution, end-users save substantial time on a daily basis, with logins shortened from 30-45 minutes to 3 to 5 minutes. Users experience improved productivity, as they are now able to transfer an open work session among different terminals. Region H has reduced support costs, with IT able to provision client endpoints at a timesavings of one hour each, and users have single sign-on and simplified access to the applications they need.

Looking Ahead

Region H is now at a point where the initial platform delivered lives up to the expectations of its users. Region H is looking into an upgrade project that would move ESA from Windows XP to Windows 7 in the near future.

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